

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **07184556 A**

(43) Date of publication of application: **25.07.1995**

(51) Int. Cl. **A23J 3/08**

A23D 9/00, A23J 1/20, A23L 1/307

(21) Application number: **06253310**

(22) Date of filing: **19.10.1994**

(30) Priority: **16.11.1993 JP 05286552**

(71) Applicant: **TAKEDA SHOKUHIN KOGYO KK**
SANKI SHOJI KK

(72) Inventor: **YAMAMOTO KENRO**
YAMAMOTO YOSHIHIRO
NUNOME TETSUO
MUROYAMA KOTARO
KUSAKA HIROAKI

(54) **PROTEINACEOUS VERY FINE PARTICLE AND ITS PRODUCTION**

(57) Abstract:

PURPOSE: To obtain the subject particles useful as a fat substitute having smooth and glossy solid fat and oil-like physical properties without heating and high shearing by treating a solution of a whey protein containing a metal element by a specific method.

CONSTITUTION: First, the pH of a solution of a whey protein containing a metal element (preferably Ca) is reduced with hydrochloric acid to preferably 3-5 under

non-heating conditions to remove insoluble materials such as casein. Then the pH of the solution is raised preferably to 7 and the solution is mixed with a hydrophilic organic solvent (preferably ethanol) to deposit the objective particles. The solution of the whey protein containing the metal element preferably has 0.1-5wt.% protein concentration and 1.5 millimol-1.5mol metal element concentration based on 1g whey protein. The amount of the hydrophilic organic solvent used is preferably 0.5-2 times (V/V) as much as the solution of the whey protein.

COPYRIGHT: (C)1995,JPO